## <u>AMENDMENTS TO THE CLAIMS</u>

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This listing of claims will replace all prior versions, and listings of claims in the application. MAY 2 § 2007

## Listing of claims

1. (Previously presented) A method of identifying a human having an altered risk for developing Alzheimer's disease, comprising detecting the presence of a single nucleotide polymorphism (SNP) at position 101 of SEQ ID NO: 7368 or its complement thereof in said human's nucleic acids, wherein the presence of the SNP is indicative of an altered risk for Alzheimer's disease in said human.

## 2. - 35. (Canceled)

- 36. (Previously presented) The method of claim 1 in which said human has Alzheimer's disease.
- 37. (Previously presented) The method of claim 1 in which SEQ ID NO: 7368 is contained within the genomic sequence as represented by SEQ ID NO: 6756.
- 38. (Previously presented) The method of claim 1 in which the SNP to be detected is located at position 41788 of SEQ ID NO: 6756.
- 39. (Previously presented) The method of claim 1 in which said human's nucleic acids are extracted from a biological sample therefrom.
- 40. (Previously presented) The method of claim 39 in which said biological sample is blood.
- 41. (Previously presented) The method of claim 1 in which said human's nucleic acids are amplified before the detection is carried out.

- 42. (Previously presented) The method of claim 1 in which detection is carried out by using detection reagents comprising the nucleotide sequences of SEQ ID NO: 55277, SEQ ID NO: 55278, and SEQ ID NO: 55279.
- 43. (Previously presented) The method of claim 1 in which detection is carried out by a process selected from the group consisting of: allele-specific probe hybridization, allele-specific primer extension, allele-specific amplification, sequencing, 5' nuclease digestion, molecular beacon assay, oligonucleotide ligation assay, size analysis, and single-stranded conformation polymorphism.
- 44. (Currently amended) A method of identifying a human having an increased risk for developing Alzheimer's disease, comprising detecting the presence of a single nucleotide polymorphism (SNP) at position 101 of SEQ ID NO: 7368 or its complement thereof in said human's nucleic acids, wherein the presence of C at position 101 of SEQ ID NO: 7368 is indicative of an increased risk for myocardial infarction Alzheimer's disease in said human.
- 45. (Previously presented) The method of claim 44 in which said human has Alzheimer's disease.
- 46. (Previously presented) The method of claim 44 in which SEQ ID NO: 7368 is contained within the genomic sequence as represented by SEQ ID NO: 6756.
- 47. (Previously presented) The method of claim 44 in which the SNP to be detected is located at position 41788 of SEQ ID NO: 6756.
- 48. (Previously presented) The method of claim 44 in which said human's nucleic acids are extracted from a biological sample therefrom.
- 49. (Previously presented) The method of claim 48 in which said biological sample is blood.

- 50. (Previously presented) The method of claim 44 in which said human's nucleic acids are amplified before the detection is carried out.
- 51. (Previously presented) The method of claim 44 in which detection is carried out by using detection reagents comprising the nucleotide sequences of SEQ ID NO: 55277, SEQ ID NO: 55278, and SEQ ID NO: 55279.
- 52. (Previously presented) The method of claim 44 in which detection is carried out by a process selected from the group consisting of: allele-specific probe hybridization, allele-specific primer extension, allele-specific amplification, sequencing, 5' nuclease digestion, molecular beacon assay, oligonucleotide ligation assay, size analysis, and single-stranded conformation polymorphism.
- 53. (Currently amended) A method of identifying a human having a decreased risk for developing Alzheimer's disease, comprising detecting the presence of a single nucleotide polymorphism (SNP) at position 101 of SEQ ID NO: 7368 or its complement thereof in said human's nucleic acids, wherein the presence of T at position 101 of SEQ ID NO: 7368 is indicative of a decreased risk for myocardial-infarction Alzheimer's disease in said human.
- 54. (Previously presented) The method of claim 44 in which said human has Alzheimer's disease.
- 55. (Previously presented) The method of claim 53 in which SEQ ID NO: 7368 is contained within the genomic sequence as represented by SEQ ID NO: 6756.
- 56. (Previously presented) The method of claim 53 in which the SNP to be detected is located at position 41788 of SEQ ID NO: 6756.
- 57. (Previously presented) The method of claim 53 in which said human's nucleic acids are extracted from a biological sample therefrom.

- 58. (Previously presented) The method of claim 57 in which said biological sample is blood.
- 59. (Previously presented) The method of claim 53 in which said human's nucleic acids are amplified before the detection is carried out.
- 60. (Previously presented) The method of claim 53 in which detection is carried out by using detection reagents comprising the nucleotide sequences of SEQ ID NO: 55277, SEQ ID NO: 55278, and SEQ ID NO: 55279.
- 61. (Previously presented) The method of claim 53 in which detection is carried out by a process selected from the group consisting of: allele-specific probe hybridization, allele-specific primer extension, allele-specific amplification, sequencing, 5' nuclease digestion, molecular beacon assay, oligonucleotide ligation assay, size analysis, and single-stranded conformation polymorphism.
- 62. (Currently amended) A method of determining a human's risk for developing Alzheimer's disease, comprising detecting a single nucleotide polymorphism (SNP) at position 101 of SEQ ID NO: 7368 or its complement thereof in said human's nucleic acids, wherein the presence of C at position 101 of SEQ ID NO: 7368 is indicative of an increased risk for myocardial infarction Alzheimer's disease in said human, or the presence of T at position 101 of SEQ ID NO: 7368 is indicative of a decreased risk for developing myocardial infarction Alzheimer's disease in said human.
- 63. (Previously presented) The method of claim 62 in which said human has Alzheimer's disease.
- 64. (Previously presented) The method of claim 62 in which SEQ ID NO: 7368 is contained within the genomic sequence of LRP2 gene as represented by SEQ ID NO: 6756.

- 65. (Previously presented) The method of claim 62 in which the SNP to be detected is located at position 41788 of SEQ ID NO: 6756.
- 66. (Previously presented) The method of claim 62 in which said human's nucleic acids are extracted from a biological sample therefrom.
- 67. (Previously presented) The method of claim 66 in which said biological sample is blood.
- 68. (Previously presented) The method of claim 62 in which said human's nucleic acids are amplified before the detection is carried out.
- 69. (Previously presented) The method of claim 62 in which detection is carried out by using detection reagents comprising the nucleotide sequences of SEQ ID NO: 55277, SEQ ID NO: 55278, and SEQ ID NO: 55279.
- 70. (Previously presented) The method of claim 62 in which detection is carried out by a process selected from the group consisting of: allele-specific probe hybridization, allele-specific primer extension, allele-specific amplification, sequencing, 5' nuclease digestion, molecular beacon assay, oligonucleotide ligation assay, size analysis, and single-stranded conformation polymorphism.